PUBLIC WORKS AND SERVICES

OVERVIEW

MISSION

The Department of Public Works and Services mission is to deliver quality services to satisfy the needs of its clients, while achieving the best value for government, communities, business and residents.

GOALS

1. Suitable and energy efficient facilities are available to support delivery of government programs.
2. Protection of life and property is achieved through the enforcement of the provisions of electrical, gas, boiler and pressure vessel legislation.
3. Suitable information technology infrastructure and services are available to support the delivery of government programs and services.
4. Basic community needs for heating, transportation and power generation fuels are met through the safe and reliable provision of fuel services.
5. Suitable telecommunications services are available to NWT residents.
6. Effective management of government records.

BUDGET (2008/9)

Compensation & Benefits	$19,635,000
Grants & Contributions	$0
Other O&M	$34,777,000
Amortization	$3,388,000

POSITIONS (2008/9)

Headquarters (HQ)	107 positions
Regional/Other Communities	147 positions

KEY ACTIVITIES

Corporate Management
Asset Management
Technology Service Centre
Petroleum Products

STRATEGIC ACTIONS

Change the GNWT's approach to Infrastructure
Managing the Cost of Government
Improve Skills for Living and Working
Protect Territorial Water

STRATEGIC ISSUES

Infrastructure Challenges

The GNWT's traditional approach to planning and acquiring infrastructure is not as successful as we need it to be. The GNWT needs to consider different approaches to planning and acquiring the infrastructure to deliver the necessary programs and services to its residents.

The GNWT is facing a difficult challenge in providing the programs and services residents require given the fiscal resources available. Delivering and maintaining the infrastructure from which to deliver these programs and services also faces the same challenges.

The fiscal reality is that the GNWT's infrastructure needs exceed, by a wide margin, its financial ability to address them. Therefore, the GNWT is challenged to explore broad and innovative approaches to infrastructure planning, acquisition, usage and maintenance.

Improving the Management of GNWT Infrastructure

In response to the infrastructure challenges faced in the NWT, the Premier established the Ministerial Sub-Committee for Infrastructure to review, advise and provide recommendations on how best to plan for, acquire and deliver infrastructure projects in the territory.

Under the guidance and direction of the Ministerial Sub-Committee for Infrastructure, the Departments of Public Works and Services and Transportation and the Northwest Territories Housing Corporation are working collaboratively to support Cabinet's direction that an examination of options be undertaken, including the organizational design of an infrastructure department, to improve the management of GNWT infrastructure, particularly at the regional and community level. Options and recommendations will be provided to Cabinet in early 2009. It is expected that the 2009/10 fiscal year will be spent developing and implementing direction that Cabinet may provide with respect to those options and recommendations.

Aging Infrastructure and Deferred Maintenance

Deferred maintenance is the practice of allowing infrastructure to deteriorate by postponing prudent but non-essential repairs to save costs, labor and/or material. The failure to perform needed repair, maintenance, and revitalization by normal maintenance management creates deferred maintenance. Generally, a policy of continuing deferred maintenance will result in higher costs or building failure than if the required maintenance had occurred.

Maintenance competes for funding with other programs and is often deferred because appropriations are not available or were redirected to other priorities or projects. Deferred maintenance is often not immediately reported -- and sometimes, not at all. Maintenance which is deferred because of insufficient funding may result in increased safety hazards, poor service to the public, higher costs in the future, building system failures, and inefficient operations.

The issue of deferred maintenance is impacting all jurisdictions in Canada. In the NWT the increasing age of GNWT infrastructure is creating additional safety risks and compounding the deferred maintenance deficit. Investing to address deferred maintenance will prevent safety related building closures and will ensure building infrastructure is available for continued program delivery.

Energy Management

With over 350 fixed assets that consume approximately 17.7 million litres of fuel, there are significant economic and environmental gains to be realized by reducing the energy requirements of these GNWT assets.

The general consensus is that the cost of petroleum products will continue to be expensive through the long term. This and the need to reduce greenhouse gas emissions by lowering the reliance on diesel fuel provide compelling reasons for the GNWT to continue to work towards the development and use of alternative forms of energy.

Retrofits, though necessary on inefficient buildings, are more expensive than ensuring that buildings are energy efficient when first constructed. Life-cycle cost analysis needs to be considered in new building construction estimates to minimize energy use.

PWS has initiated several energy conservation projects to reduce energy consumption and greenhouse gas emissions and plans to continue work in this area. To date, the department has completed several projects that reduce both the cost of operating GNWT infrastructure and the negative impacts on our Northern environment. Some of these projects include:

- A Biomass Heating System (Wood Pellet Heating System) – North Slave Correctional Facility (NCSF)
- Infrared Thermal Scanning of GNWT and Community Buildings
- Inspection of Building Mechanical and Electrical Systems to identify opportunities for energy conservation.
- Use of Air-to-Air Heat Pump – Thebacha Campus Records Storage Warehouse, Fort Smith
- A hybrid power system at the 60th Parallel Visitors' Information Centre
- Conversion from fuel-fired heating to electric heat in JBT Elementary School and Breynat Hall in Fort Smith (completed in October 2008)

Over the next four years, PWS will continue to work toward making GNWT infrastructure more cost effective and environmentally friendly. $970,000 in funding available through the Federal Eco-trust Fund will be used to support projects that will reduce GNWT energy use and achieve reductions in air pollutants and greenhouse gas emissions from facilities across the North. These projects include:

- Conversion of the Maintenance Garage in Fort Smith to electric heat
- Installation of wood pellet boilers in the Chief Jimmy Bruneau School in Behchoko
- A Geothermal Ground Source Heat Pump project at the Aurora College Campus in Fort Smith.
- Infrared thermal scanning surveys and detailed energy audits on selected buildings across the territory

Information Management

The GNWT's information management environment continues to evolve and impact PWS. During the 2007/08 fiscal year, the Informatics Policy Committee established a new governance structure for information management in the GNWT. These changes have resulted in an improvement in planning and decision-making processes for corporate systems. This in turn has improved PWS's ability to respond to client needs.

The information management industry, however, is characterized by rapidly changing technology, which presents both challenges and opportunities for the Department. At the same time that technological advances present opportunities for new and improved services for clients, they also increase the technical complexity of the working environment. Ensuring the reliable operation of these complex systems will continue to be a major challenge for the Department. PWS will continue to monitor developments in information technology, and, where necessary, upgrade hardware and software to support client department's needs.

While rapid evolution in information hardware and software is a major challenge for the Department, an equally great challenge is posed by the recorded information that is created and stored on these systems. Desktop PC applications, including email, are being used to support the creation, circulation, editing, and storage of government documents. In addition, large-scale electronic database systems are being used to manage and maintain critical government information resources such as human resources and financial information. The GNWT's reliance on on paper-based documentation is giving way to reliance on records available and accessible only in electronic format. In order to manage the growing problem of departments' electronic records, PWS continues to focus on the evolving field of electronic records management and provides training and assistance to departments in implementing their electronic records management programs.

As part of its efforts to identify and implement improved methods for managing electronic documents, PWS has initiated a pilot project using document management software. If the initial pilot is successful, the document management system will be rolled out to all PWS employees.

Resource Development Impacts

Once construction begins on a Mackenzie Valley Pipeline, PWS would be required to conduct inspections and approve the installation of boilers under the Boilers and Pressure Vessels Act, if it signs a Memorandum of Understanding (MOU) to carry out these inspections on behalf of the National Energy Board (NEB). The Electrical/Mechanical Safety Section would require at least 2 additional inspectors to perform work during the pipeline, based on the information available. Estimates of the initial number and location of pressure vessels have been received from the NEB and Imperial Oil Resources Ventures Limited (IORVL). Once PWS obtains the approved final numbers, the required number of inspectors may change. All pipeline camps would undergo electrical and gas (propane) inspections in accordance with legislation, if an MOU is signed with the NEB.

With project approval the Facility Management section of PWS will need to review the office space requirements of departments approved for new and the extension of existing GNWT term project related positions.

Once decisions are made on funding position requirements, PWS will return to the FMB for approval to fund the acquisition and tenant improvement costs of the required office space.

Petroleum Products

In response to the challenge of rising oil prices and increased variability in the market, the Petroleum Products Division (PPD) is focused on exploring strategic partnerships and ways to stabilize the costs for people in communities served by the program.

- PPD has entered into a ten-year agreement (2005-2015) to provide fuel delivery and maintenance services to the Northwest Territories Power Corporation for 20 of their fuel storage facilities. This increase in sales volume has had a direct and positive impact on PPD's operating levies charged to customers.
- In partnership with Northern Transportation Company Limited, PPD is exploring new resupply routes to reduce shipping costs and gain access to a larger, more competitive market for fuel supply. The prospect of including industry and government as partners would greatly increase fuel volume and have a beneficial affect on the cost to land product in NWT communities.
- PPD strives to operate in a stable financial position. Full operational cost pricing and the elimination of cross-subsidization between communities and products has helped achieve this stability.

- Recent revisions to the *Financial Administration Act* and the *Revolving Funds Act* will permit the use of hedging as an opportunity to improve the stability and predictability of fuel prices several months in advance of the annual resupply.

PPD has an active and ongoing program of environmental remediation on a number of sites throughout the NWT. PPD is committed to ensuring a reliable supply of fuel and improved environmental performance through the upgrading of its facilities and equipment through the GNWT's capital plan.

In addition, PPD is responding to critical market demands to support the aviation industry by providing certified aviation fuel in strategic communities. This will support and improve efficiency of scheduled air services.

Self-Government

Over the past few years, substantial progress has been made with self-government agreements. New community and aboriginal governments were established in the Tłı̨chǫ area in August 2005. Discussions have now turned towards implementation of this agreement and planning for implementation of other agreements. As discussions proceed, Public Works and Services (PWS) will obtain a better understanding of its role in delivering services to new program delivery agencies. In the meantime, there continues to be uncertainty over:

- the extent to which PWS will continue to be involved in facility construction and maintenance related to programs managed by new aboriginal governments,
- the extent to which PWS will be required to support programs that are not transferred to these new government structures,
- the ability of aboriginal governments to access expert level technical support either internally or from the private sector,
- the extent to which corporate services such as data communications, computer systems or records management systems will be required to address the needs of the new governments, and
- the ongoing territorial role in monitoring and enforcing life safety standards related to water systems, or building design and operation.

It will be important for PWS to monitor and adapt to these changes in order to ensure that it has the appropriate resources in place to support transition to the new government structures, to meet its ongoing responsibilities, and to mitigate the impact on staff.

CORPORATE MANAGEMENT

Description

The Directorate includes the Deputy Minister's office and Corporate Services Division at Headquarters. In the regions, the Directorate includes the Superintendent and the Finance and Administrative services. The Directorate is responsible for the overall management of the department, managing human and financial resources and providing overall direction and planning. Activities in the Directorate include financial administration, policy and planning, information systems and records management, and regional program delivery.

Records Management is responsible for the delivery of services to GNWT departments, boards, and agencies. Responsibilities include developing government-wide policies, standards and guidelines, support and training, records storage and retrievals and maintaining systems such as the Administrative Records Classification System (ARCS) and the Integrated Recorded Information Management System (iRIMS). It also coordinates the operation of four GNWT records centres, located in Yellowknife, Inuvik, Fort Smith and Fort Simpson. Funding is in place to establish a fifth records centre in Hay River during 2008-09 with completion planned for the start of 2009-10.

The Directorate co-ordinates activities in support of GNWT priorities and departmental goals, and maintains effective communication within the department, and with other departments, governments including aboriginal self-governments, the private sector, and other interest groups.

Measures:

- Overall client satisfaction
- Training requests are satisfied
- Response to routine records retrievals requests are completed in within 24 hours.
- Response to urgent records retrievals requests completed within 2 hours.

2008/9 Resources

Budget:

Compensation & Benefits	$4,935,000
Grants & Contributions	-
Other O&M	$1,654,000
Amortization	-

Staffing (Positions):

Headquarters (HQ)	17
Regional/Other Communities	29

Major Program and Service Initiatives

The responsibility for effectively representing territorial interests at CRTC regulatory hearings has been in PWS many years as the department was responsible for acquiring telephones and telephone service for GNWT departments (since transferred to departments under "user say user pay" initiative in 1996). Up until the amalgamation of the System and Computer Services division (S&CS) with the Technology Service Centre (TSC) to form the new TSC in 2005, PWS, through S&CS had the human resource capacity to effectively take on this role.

Since amalgamation in 2005, the TSC has not had the human resource capacity to fulfill this role and the Deputy Minister, PWS with the assistance of staff resources from the Office of the Chief Information Officer (OCIO) in FMBS have been fulfilling the role along with assistance from an experienced consultant.

Given that the role and utilization of telephony technology to transfer voice and data traffic, while still important, is diminishing in favour of other emerging technologies (e.g. wireless, VOiP, internet, satellite etc) that are not only becoming the dominant way to transport voice and data traffic, these technologies are converging and there is a requirement for the GNWT to take a more holistic approach to these technologies. The GNWT's goal is to ensure that the interests of the GNWT and NWT residents are fully considered with respect to any future decisions the CRTC and/or the Government of Canada may take with respect to market regulation of these required services.

The OCIO is in the best position to take on this activity as they are already dealing with Canada with respect to broadband issues and deal with the private sector, on behalf of the GNWT, for cell phone services. Therefore, PWS will transfer this responsibility and $60,000 in O&M funding (to retain consulting services) to the FMBS starting in 2009/10.

Measure:

- Telecommunications Regulatory – CRTC Decisions / Interventions that reflect territorial interests

KEY ACTIVITY 1: ASSET MANAGEMENT

Description

The Asset Management Division is responsible, on behalf of government departments, for the planning, design, construction, operation and maintenance of buildings and works throughout the NWT. Regional offices manage the delivery of maintenance and project management services, ensuring that client needs are met and facility life cycle costs are minimized. Headquarters supports the regions by providing facility planning , technical expertise for program and design standards, facility evaluations, troubleshooting, facility commissioning, granular materials planning and coordination, procurement and project management support, and technical support for safe drinking water initiatives.

PWS assumes responsibility for energy management within the government facilities it maintains. For existing buildings, this includes energy consumption analysis and benchmarking, detailed energy audits, infrared thermal scanning, and the inspection of electrical and mechanical systems. For new buildings, the EcoEnergy Validation Program Protocol is used, which includes computer modeling of energy use. As part of the modeling, an energy workshop with designers, clients, and operators allows various equipment options to be discussed and simultaneously modeled for energy consumption and savings.

Asset Management also coordinates the GNWT's Capital Planning process as well as the planning, acquisition and management of general office space for the GNWT, including leases, and the disposal of the GNWT's surplus real property assets.

Inspection Services is responsible for the administration and regulation of electrical, elevator, boiler, pressure vessel and gas safety. These tasks protect the public by ensuring that all installations are constructed, all equipment is approved, and all workers are certified in accordance with the various codes and NWT Acts.

Major Program and Service Initiatives

Deferred Maintenance Initiative
The Deferred Maintenance initiative provides increased levels of funding for maintenance of aging territorial infrastructure. This funding will address the backlog of maintenance issues identified from building condition assessments completed as part of the Risk Management Program. The benefits of this increased maintenance include:

2008/09 Budget:

Compensation & Benefits
$14,700,000

Grants & Contributions
$0

Other O&M
$33,123,000

Amortization
$1,406,000

Staff (Positions):

36 HQ
103 Regional/Other

Measures:

Asset Management
Client Satisfaction Surveys in the areas of project management, asset maintenance, facility planning and management, and technical support services.

Deferred Maintenance
Percentage of life safety deferred maintenance issues addressed

Asset Maintenance
Percentage of Code mandated Preventative Maintenance work completed

Property Management
Percentage of accommodation that meet GNWT standards

Energy Management
Reduce greenhouse gas emissions in the NWT to 10% below emission levels of 2001 by 2011.

- Safer, code updated buildings
- Reduction in unplanned building closures,
- Continued availability of building space for program delivery,
- Improved building energy efficiency
- Longer building lifespan

Energy Management Initiatives

Retrofits identified thorough the thermal scans and energy audits completed by the energy management specialist will be undertaken to improve the energy efficiency of GNWT infrastructure that is maintained by PWS. Other energy management initiatives include biomass fuelled boiler conversions, Fort Smith electrical heating system conversions, and the application of improved energy standards to new infrastructure construction undertaken by PWS. The Benefits of undertaking these initiatives include;

- Reductions in Greenhouse Gas Emissions
- Reduction in consumption of non-renewable energy supplies
- Mitigation of building operating cost increases due to energy cost increases

Office Accommodations – Inuvik

The GNWT vacated leased office space in the Perry Building due to structural and other deficiencies in 2006. Due to the shortage of suitable office facilities in the community, GNWT employees are required to work in substandard space in aged buildings. Office occupant satisfaction surveys over the last several years have confirmed that employees in these buildings are very dissatisfied with their office accommodation.

- FMB approved the inclusion of a design-build-own capital project for a 3,575 m2 multi-use facility and a 793 m2 records storage facility for inclusion in the 2009-2010 Infrastructure Acquisition Plan .
- PWS included the project in the *2008/09 Supplementary Appropriation No. 2* to advance $500,000 from FY 2009/10 to the FY 2008/09 plan to accelerate the project.

Asset Management Division Reorganization

The Asset Management Division will be reorganized to be better positioned to address the changes to infrastructure planning, acquisition and delivery identified by the Ministerial Subcommittee for Infrastructure and any subsequent direction by Cabinet with respect to the implementation of options to improve the management of GNWT infrastructure.

KEY ACTIVITY 2: TECHNOLOGY SERVICE CENTRE

Description

The Technology Service Centre (TSC) provides information technology (IT) services and support to all GNWT departments. This includes desktop/laptop support, application hosting, storage management, networks, e-mail, and computer operations. GNWT boards, agencies, and Crown corporations receive a subset of TSC services, which varies based on the organization. The TSC is funded through chargeback of its services and support to its clients.

The TSC manages the government's primary data centre in the Stuart M. Hodgson Building. The TSC is also responsible for two smaller data centres in Fort Smith and Inuvik.

The TSC provides services to all clients on a 24/7 basis, as most systems are available around the clock. The Service Desk has staff on call to respond to critical situations encountered by its clients.

Major Program and Service Initiatives

Network Management Enhancements
The network includes several components; the most critical is the Digital Communications Network (DCN) that connects all GNWT offices. Other major pieces of the network include Internet connectivity and the network connections within each community. A strategic network plan was recently completed and it includes recommendations to be implemented within a five-year planning horizon.

Some of the benefits the GNWT should achieve from network management will include:

- Prioritization of specific types of network traffic
- Segmentation of various types of traffic to maximize performance and cost-effectiveness
- Network reporting
- Management of capacity demands, and future architecture options.

Continuous Service Improvement
During 2007-8, the TSC embarked on a series of service improvement initiatives. The first step was a series of workshops to better understand gaps in TSC services and client requirements. This led to a Service Improvement Plan which identified the highest priority initiatives to be undertaken during the balance of 2007 and the first half of 2008.

2008/09 Budget:

Compensation & Benefits
$6,019,000 (chargeback)

Grants & Contributions
None

Other O&M
$8,705,000 (chargeback)

Amortization
$953,000

Staff (Positions):

50 HQ
5 Regional

Measures:

Computing & Data Communications
Overall Client Satisfaction

Desktop Support Services
Number of Service Desk Calls answered within 30 seconds

Number of Service Desk Calls resolved without sending a TSC technician

Number of Service Desk Calls followed up for quality control

Prime time availability of file and printer servers

Computing & Data Communications
Number of Major Security Incidents

Data Storage Enhancements
Following the release of an RFP, the TSC awarded a contract to begin implementing the recommendations put forward in the Storage Management Report. The work under this RFP will continue through 2008, with the expectation that tiered storage will be in place during 2008-09. Other recommendations will be addressed gradually in future years.

Disaster Recovery Planning
In order for the TSC to provide the protection and availability of GNWT data and applications that are required, and to address structural limitations within the existing data centre, a new data centre will be built. The project will begin in 2009/10 and be complete in 2012/13 at a cost $13 million.

Once the new data centre is complete, the existing data centre in the Stuart Hodgson building will become the back-up centre. It will be used to provide the disaster recovery and business continuity functions required by the GNWT.

KEY ACTIVITY 3: PETROLEUM PRODUCTS

Description

The Petroleum Products Division (PPD) purchases, transports, and stores the annual requirements for petroleum products in NWT communities not served by the private sector. The products are then sold to residents of the communities through local contractors, who are paid a commission. PPD also provides fuel delivery and maintenance services to NWT Power Corporation tank farm facilities in 20 communities.

PPD has its financial and administrative headquarters in Fort Simpson, with responsibilities for credit, invoicing, collections and financial planning. The Fuel Services unit oversees PPD functions in the communities and manages local delivery contractors. In addition, Operations staff determines re-supply quantities and provide quality control, capital standards and planning, and environmental management.

The PWS Asset Maintenance (Deh Cho Area) function within PPD manages the operations, maintenance and disposal of GNWT goods and buildings and when requested supports community governments in the management of their infrastructure responsibilities.

Major Program and Service Initiatives

The PPD is now organized into three functional service delivery units: Fuel Services, Finance and Administration, and PWS Asset Maintenance for the Deh Cho Area.

To reduce operational and administrative costs and increase inventory accuracy and control, PPD will complete the installation of a modern management information system. This will include fuel inventory control and accounting software, "Point of Sale" devices. The installation of "Card-Lock" self-serve dispensing equipment, as well as electronic inventory monitoring and metering equipment are planned future initiatives

To effectively reduce the cost of transportation, PPD will significantly increase the volume of fuel transported to the GNWT by bulk marine tanker via the Alaskan "over the top" route.

PWS has begun the review and amendment of the Northern Fuel Storage and Distribution Facilities Design Rationale document, the Specifications document, and the Detailed Drawings. These rewrites will be completed during 2008, and will incorporate the most recent code requirements and best building practices.

2008/09 Budget:

Product Sales
$26,920,000
(income after taxes)

Salaries
$1,722,000
(revolving fund)

$1,214,000
(appropriated)

Grants & Contributions
None

Other O&M/Expenses
$1,225,000
(revolving fund)

$1,797,000
(appropriated)

Amortization
$1,029,000

Staff (Positions):

4 HQ (revolving fund)
10 Regional/Other (revolving fund)
15 Regional/Other (appropriated)

Measures:

Number of incidents of fuel rationing

Number of incidents of fuel run-out

Administration and overhead costs as a percentage of gross expenditures

Number of litres of fuel spilled as a percentage of annual sales volume

STRATEGIC INITIATIVE: MANAGING THIS LAND
Action: Protect Territorial Water

Description

As part of the implementation of the NWT Water Strategy, PWS will be carrying out a $30,000 pilot program in the communities of Fort Resolution and Fort Simpson in 2008/09. These remote systems will monitor two health based parameters, turbidity and chlorine as per H&SS requirements.

Remote monitoring and control systems have potential to strengthen the multi-barrier approach; reduce human health risks; facilitate more cost effective technical support to community operators; and address short- term gaps in operator certification.

Objectives

Install remote systems in the two identified communities.

Begin monitoring the turbidity and chlorine in the community water supplies.

Evaluate the success of the remote systems and consider the possibility of similar installations in additional NWT communities.

Action Plan

- Purchase pumps, pipes, pipe fittings and miscellaneous items for installation – July/August 2008
- Install turbidity meters and chlorine sensors in Ft Providence and Ft Resolution water treatment plants (Install meters and sensors, piping modifications, pumps and miscellaneous electrical and mechanical work) – Sep/Oct 2008
- System testing, commissioning and operator training including Municipal and Community Affairs and Health and Social Services staff – Oct/Nov 2008

STRATEGIC INITIATIVE: MAXIMIZING OPPORTUNITIES
Action: Improve Skills for Living and Working

Description

This initiative is an attempt to respond to the current shortage of skilled tradespersons in the NWT. The shortage is particularly problematic in light of responding to, and or preparing for, the current and anticipated growth in resource development and activity in the construction, oil and gas, and mining sectors. Furthermore, the shortage of skilled tradespersons contributes in part to rising costs and delays in project delivery.

PWS has created eight four-year apprenticeship positions in designated trades and occupations in five NWT communities. These include carpenters in Fort Simpson, Fort Smith and Norman Wells; an electrician in Inuvik; plumber/gas fitters in Fort Simpson, Hay River and Inuvik; and a stationary engineer in Hay River.

Objectives

To staff all eight available apprenticeship positions.

Ensure that apprentices receive a full range of necessary trades work experience.

Have trained staff available for succession planning when existing staff retire.

Action Plan

Presently, all apprentice positions in PWS are filled with the exception of the Carpenter position in Norman Wells and an Electrician position in Inuvik. These positions are vacant and staffing is underway.

The department has had limited success in staffing and retaining employees in the apprentice positions since being approved in 2007-08. Several of the apprentices hired have already left the program to accept positions in the private sector. A primary reason cited for leaving has been the inadequate compensation offered by the GNWT to apprentices.

PWS intends to examine other ways to make these positions attractive to apprentices in the designated communities.

STRATEGIC INITIATIVE: REFOCUSING GOVERNMENT

Action: Change the GNWT's Approach to Infrastructure

Description

Building on Public Works and Services' Risk Management and Safety Program, there is a confirmed requirement for increased levels of maintenance on territorial infrastructure. This program has led to increased regular facilities condition assessments, and has quantified critical maintenance deficiencies in the Government of the Northwest Territories' current infrastructure stock.

To date, assessments have identified over $387 million in deferred maintenance costs within GNWT facilities as follows:

Priority 1 – Currently Critical	$28.9 million
Priority 2 – Potentially Critical	$143 million
Priority 3 – Not Yet Critical	$176 million
Priority 4 – Recommended	$17.3 million
Priority 5 – New Code Requirements	$20.9 million

It should be noted that the $387 million in deferred maintenance only includes those buildings inspected by PWS to date. With the increased information now available, the GNWT is now able to recognize the need for both regular maintenance and large-scale reconstruction projects. There may be a need to shift from construction of new buildings to improving and maintaining current assets.

Between FY 2008-2009 and 2011/12, a total of $31.65 million of incremental capital and O&M funding has been targeted for deferred maintenance.

	2008/09	**2009/10**	**2010/11**	**2011/12**
Capital Funding	5,000	5,000	5,000	5,000
O&M	2,650	3,000	3,000	3,000

The GNWT will see many benefits through the implementation of this program, including safer buildings, a reduction in the number of unplanned building closures, a reduction in the use of substandard facilities, a reduction in unplanned expenditures and the deferral of major capital expenditures.

Objectives

To regularly record and retain facility condition information so it can be used to identify facility condition trends;

To prioritize investment of scarce capital when replacing and renovating infrastructure; and

To identify the overall health of the GNWT's inventory for use in assessing the adequacy of capital rehabilitation and replacement funding.

Action Plan

In 2008/09 PWS will complete facility condition inspection reports on 200 additional GNWT facilities.

In 2008/09 PWS will address all the Priority 1 issues identified to date and some of the Priority 2 issues. This will address the immediate risks associated with those buildings and ensure the safety of those employees and members of the public who use these facilities to deliver and receive GNWT programs and services.

After 4 years of implementing this program in conjunction with investment from the Infrastructure Acquisition Plan, it is expected that all Priority 1, 2 and a good portion of Priority 3 issues, identified to date, will be addressed.

STRATEGIC INITIATIVE: REFOCUSING GOVERNMENT
Action: Managing Cost of Government

Description

Federal Eco-Trust Funding

In March 2007 the Federal Government of Canada announced that the Government of the Northwest Territories (GNWT) would receive $5 million in Federal EcoTrust funding to support specific projects designed to achieve reductions in air pollutant and greenhouse gas emissions.

In April 2007, FMB approved supplementary funding of $3,350,000 for four initiatives associated with the GNWT Energy Plan and the Greenhouse Gas Strategy. The EcoTrust Fund offset this funding leaving $1,650,000 in the fund for future energy or air pollutant reducing activities. PWS has identified and included four such projects in its business plan to reduce energy consumption and greenhouse gas emissions.

Capital Asset Retrofit Fund

Using the data gained through energy audits and infrared thermographic and mechanical/electrical system analyses of GNWT buildings, further information collected by more scans, and other on-site or background research, the best buildings for reinvestment (via renovation or retrofit) will be selected. Each year, this overall energy retrofit plan will be re-used to address several of the worst energy-consuming assets. This program supports the Government's objective to reduce energy costs and greenhouse gas emissions in the Northwest Territories

For the facilities selected for reinvestment the requirements will be incorporated into the Deferred Maintenance work plan and completed in conjunction with that program.

Energy Management Specialist

The Energy Management Specialist is responsible for developing and coordinating departmental energy management programs and activities to ensure energy efficiency is maintained or improved in GNWT owned and leased facilities.

Objectives

Federal Eco-Trust Funding

Reduce GNWT energy use and achieve reductions in air pollutants and greenhouse gas emissions from facilities across the North

Capital Asset Retrofit Fund

Perform thermal scans on 60 GNWT and community buildings to identify building heat losses.

Carry detailed energy audits on 5 buildings to identify and initiate actions to reduce energy consumption costs and greenhouse gas emissions.

Energy Management Specialist

Apply Commercial Building Incentive Program (CBIP) and Eco Energy Validation Protocols in building designs to reduce building energy consumption and greenhouse gas emissions.

Investigate and research new technology, as it may be applicable to projects to reduce energy costs and greenhouse gas emissions – ITI shower facilities in Jak and Happy Valle parks in the Inuvik Region

Action Plan

Capital Asset Retrofit Fund

- Develop a list of communities to be scanned
- Make arrangements with building owners/users to scan the buildings
- Complete infrared thermal scans by February 27, 2010
- Complete detailed reports by April 1, 2010,
- Prioritize buildings for detailed energy audits,
- Complete detailed energy audits and reports,
- Identify buildings and budgets for retrofits to reduce energy consumption and greenhouse gas emissions by April 1, 2010.

Energy Management Specialist

- Participate in design reviews
- Attend Energy Modeling Workshops
- Participate in Community Energy and Student Career Fairs
- Travel to communities to complete thermal scans by Feb 27,2010 and energy audits at a rate of 4 -5/year
-

Federal Eco-Trust Funding

- Conversion of the DOT Maintenance Garage in Fort Smith to electric heat
- Installation of a wood pellet boiler in the Chief Jimmy Bruneau School in Behchoko
- A Geothermal Ground Source Heat Pump project at the Aurora College Campus in Fort Smith.
- Detailed energy audits on selected buildings across the territory

INFRASTRUCTURE INVESTMENTS

The Department's plans for infrastructure investments over the coming four year period focus on three key activity areas: Asset Management and addressing deferred maintenance, the Technology Service Centre and the Petroleum Products Division. Funding is displayed in thousands (000s).

Asset Management

Focus on Deferred Maintenance

Building on PWS' Risk Management and Safety Program (RMSP) there is a requirement for an increased focus on the maintenance of territorial infrastructure. This program has led to increased regular facilities condition assessments, which identify deficiencies in the GNWT's current infrastructure stock. To date, these assessments have quantified critical maintenance projects, in addition to projects that are needed due to new code requirements.

Multi-year capital funding has been approved to assess the condition of key GNWT building infrastructure and identifying and undertaking remedial work to ensure that the buildings continue to be safe for occupancy and to ensure that critical deferred maintenance items are addressed to maximize the useful life of these assets.

The following table details the funding identified in the GNWT 5 Year Capital Plan for this project:

2008/09	2009/10	2010/11	Future Years	Total
5,000	**5,000**	**5,000**	**5,000**	**20,000**

GNWT Multiuse Facility and Records Storage Facility - Inuvik

The GNWT is leasing office space in the Perry Building in Inuvik, which it vacated due to structural and other deficiencies in 2006. Due to an overall shortage of suitable office facilities in the community, GNWT employees are required to work in over-utilized space in aged buildings. Office occupant satisfaction surveys conducted by PWS over the last several years have confirmed that employees in these substandard buildings are very dissatisfied with their office accommodation.

FMB approved the inclusion of a design-build-own capital project for a 3,575 m2 multi-use facility and a 793 m2 records storage facility to be constructed on the old Aurora College site in Inuvik, excluding space for a Community Learning Centre for Aurora College, for inclusion in the 2008-2009 Infrastructure Acquisition Plan for PWS at a total design/construct project cost of $21,400,000.

PWS included the project in the *2008/09 Supplementary Appropriation No. 2* to advance $500,000 from FY 2009/10 to the FY 2008/09 plan to accelerate the project.

The following table illustrates the funding to be included in the GNWT 5 Year Capital Plan for this project.

2008/09	2009/10	2010/11	Future Years	Total
500	**12,000**	**8,900**	**0**	**21,400**

Technology Service Centre – New Computer Data Centre

The GNWT computer infrastructure is presently located on the 2nd floor of the Stuart Hodgson Building.

The existing data centre is nearing the end of its lifespan. As the use of technology grows and new equipment is added, limitations with floor loading, power systems, and ventilation mean that this facility cannot continue to support ongoing growth with its existing limitations. PWS Risk Management has determined that at the present rate of GNWT IT infrastructure service expansion, the existing floor loading will reach capacity within 3 years.

The internal Risk Assessment/ Impact Analysis of the Data Centre on Stuart Hodgson Building's 2nd floor has determined that an alternate data centre is required in order for the TSC to provide the protection and availability of GNWT data and applications that are required by the GNWT.

Disaster Recovery Planning - the GNWT increasingly relies on applications that the TSC hosts on its IT infrastructure. With most major application systems and networks being hosted in a single data centre, if the data centre is damaged or destroyed, the impact on GNWT operations would be severe. While a GNWT-wide business continuity planning exercise is required to fully assess the risk of various failures, the TSC has completed an internal review of the impact of a disaster occurring within the primary GNWT data centre as well as options for addressing such an impact.

The scope of work for this project includes:

- Design and construct a new facility of approximately 1,400 square metres gross floor area.
- Utilize the existing data centre in the Stuart Hodgson Building as the alternate site for recovering operations if the primary site is damaged, and for testing, and development activities for GNWT applications.
- Purchase and implement IT technologies to provide the GNWT network and Internet with appropriate redundancy and to provide the Disaster Recovery and Business Continuity capabilities required by the GNWT.

PWS included the project in the *2008/09 Supplementary Appropriation No. 2* to advance $1.3 million from FY 2009/10 to the FY 2008/09 plan to accelerate the project.

PWS is planning to start work on a new Data Centre in 2008/09 and complete work in 2010/13. The following table details the funding identified in the GNWT 5 Year Capital Plan for this project:

2008/09	2009/10	2010/11	Future Years	Total
1,300	**6,000**	**5,700**	-	**13,000**

Petroleum Products Division

Fort Good Hope – Tank Farm – Capacity Increase/Code Upgrade

The diesel and gasoline storage capacity must be increased due to the increased sales from community growth. Storage for both products is insufficient to meet demand. This is the last place to buy gasoline before going on the winter road to Colville Lake. The scope of work includes:

- Increase storage capacity for diesel fuel
- Upgrade the gasoline storage capacity

PWS started work on this project in 2007/08 and will complete work in 2009/10. The following table details the funding identified in the GNWT 5 Year Capital Plan for this project:

Total Prior Years	2008/09	2009/10	2010/11	Future Years	Total
6,388	**1,111**	**50**	-	-	**7,549**

Tulita – Tank Farm – Capacity Increase/Code Upgrade

- The gasoline storage capacity is not sufficient to meet demand and must be increased due to normal community growth.
- The bulk fuel storage facility at Tulita is aging and there are a number of Code and Environmental issues that need to be addressed.

The following table details the funding identified in the GNWT 5 Year Capital Plan for this project:

Total Prior Years	2008/09	2009/10	2010/11	Future Years	Total
-	-	-	-	**3970**	**3970**

Gameti – Tank Farm – Capacity Increase/Code Upgrade

The Community Council in Gameti has indicated that the relocation of the Bulk Fuel Storage Facility has been rated as one of the highest priorities for the community. The scope of work includes:

- Decommission and demolish the existing tank farm.
- Construct a new bulk fuel storage facility away from the centre of the community, at the alternate site.
- FY 2008/09 is the final year of this multi-year contract. The work is ongoing.

PWS will complete work on this project in 2008/09. The following table details the funding identified in the GNWT 5 Year Capital Plan for this project:

Total Prior Years	2008/09	2009/10	2010/11	Future Years	Total
3,056	**350**	**0**	-	-	**3,406**

Lutselk`e – Tank Farm – Construction

Community consumption has increased steadily over the last few years and the tank farm is at capacity. The Capital Project needs to go forward to increase capacity for diesel fuel. The scope of work includes:

- Construct a new bulk fuel storage facility away from the centre of the community, in the industrial area.
- FY 2008/09 is the final year of this multi-year contract. Work is ongoing.

PWS will complete work on this project in 2009/10. The following table details the funding identified in the GNWT 5 Year Capital Plan for this project:

Total Prior Years	2008/09	2009/10	2010/11	Future Years	Total
4,703	**2,525**	**55**	-	-	**7,283**

Wrigley – Tank Farm – Code Upgrades/Replace Dispensers

The Wrigley PPD Fuel Storage Facility was scheduled for decommissioning three (3) years ago, but funding to complete environmental remediation was delayed. The Community was left without fuel services when the private fuel delivery contractor shut down their facility, The Band contacted PPD for assistance as buildings were running out of fuel. PPD was able to get fuel into the community just prior to river breakup. PPD successfully re-activated their fuel tank farm on short notice, but the tank farm does not meet code and must be upgraded.

Scope of Work includes:

- Replacement of gasoline and diesel fuel dispenser cabinets and replacement of bulk truck supply manifold.
- Electrical system safety upgrades to provide bonding and grounding and improved area lighting.
- Installation of concrete spill pads at dispenser cabinets and truck fill station, and provision of spill response equipment.

PWS plans to start work on this project in 2008/09 and complete work in 2011/12. The following table details the funding identified in the GNWT 5 Year Capital Plan for this project:

Total Prior Years	2008/09	2009/10	2010/11	Future Years	Total
-	**275**	**250**	**125**	**25**	**675**

Deline – Tank Farm – Code Upgrade and Aviation Facility

The capacity for Diesel Fuel will be insufficient to meet demand by 2010. Diesel Fuel is being sold as an uncertified Aviation fuel and the consumption is increasing every year. An Aviation facility is required at the airport and tankage is required in the tank farm. There are Code deficiencies that must be corrected.

Scope of Work includes:

- Increase capacity for Diesel Fuel and gasoline.
- Provide a storage tank for Jet A-1 Aviation fuel within the tank farm
- Provide an Airport Aviation Facility complete with storage tanks and dispensing facilities.
- Correct all Code deficiencies.

PWS included the project in the *2008/09 Supplementary Appropriation No. 2* to advance $3.850 million from FY 2009/10 to the FY 2008/09 plan to accelerate the project.

PWS plans to complete work on this project in 2010/11. The following table details the funding identified in the GNWT 5 Year Capital Plan for this project:

Total Prior Years	2008/09	2009/10	2010/11	Future Years	Total
60	**4,289**	**4,075**	**50**		**8,414**

LEGISLATIVE INITIATIVES

Public Works and Services has no legislative initiatives planned.